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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
| 10/544,138   | 08/02/2005  | Stephan Huffer       | 274260US0PCT               | 7766             |
| 22850  | 7590        | 05/01/2008           |                            |                  |
| OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.<br>1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |             |                      | EXAMINER<br>CHUNG, RAYMOND |                  |
|  |             |                      | ART UNIT                   | PAPER NUMBER     |
|  |             |                      | 4145                       |                  |
|  |             |                      | NOTIFICATION DATE          | DELIVERY MODE    |
|  |             |                      | 05/01/2008                 | ELECTRONIC       |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/544,138 | <b>Applicant(s)</b><br>HUFFER ET AL. |  |
|                              | <b>Examiner</b><br>RAYMOND CHUNG     | <b>Art Unit</b><br>4145              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 2 Aug 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20050808</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 10 is rejected under 35 U.S.C. 101 because the claimed recitation of a method of using, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 is drawn to a method of using leather, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process Applicant is intending to encompass. A claim is indefinite where it merely recites a

method of using without any active, positive steps delimiting how this article is actually used.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

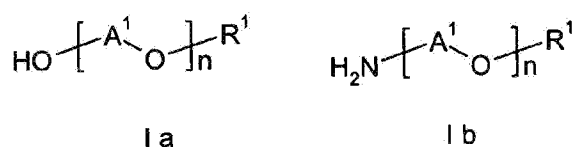
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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8. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birkhofer et al (US patent 5,433,752).

With regards to claim 1, Birkhofer et al discloses a process for the production of leather, wherein pelts, pickled pelts or semifinished products (C5/L17, tanned hide considered semifinished) are treated with at least one polymer which is obtainable by copolymerization of at least one ethylenically unsaturated dicarboxylic anhydride (A), derived from at least one dicarboxylic acid of 4 to 8 carbon atoms (C1/L54-56, see also C2/L21-26), at least one vinylaromatic compound (B) (C1/L57-58, see also C2/L27-34) and optionally at least one ethylenically unsaturated monomer (C) differing from (A) and having at least one hetero atom (C2/L1-2, 0 - 70 mol% of vinyl esters of C1- to C8-carboxylic acids, see also C2/L35-38), reaction with at least one compound (D) of the formula I a or I b



(C2/L14-19, alcohols)

and optionally hydrolysis with water or aqueous alkaline solution (C5/L9-15), in formulae I a and I b the variables being defined as follows:

A1 are identical or different and are C2-C6-alkylene (C2/L17-18, m and n are 2 to 4)

R1 is linear or branched C1-C20-alkyl (C2/L15-17, R6) and

n is an integer from 6 to 200 (C2/L18, p and q).

While Birkhofer et al discloses using 0.2 to 1.0 equivalent of the compound of formula Ia based on monomer A, the reference does not specifically teach using at least 0.55 equivalent of the compound of formula Ia based on monomer A.

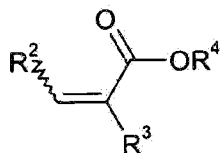
It would have been obvious to one having ordinary skill in the art at the time of invention to use at least 0.55 equivalent of the compound of formula Ia based on monomer A because such an amount of the compound of formula Ia would have been one of a finite number of identified, predictable solutions (an amount from 0.2 to 1.0 equivalent of the compound of formula Ia based on monomer A). A person of ordinary skill has good reason to pursue the known options (equivalents between 0.2 and 1.0) within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.

With regards to claims 2-6, Birkhofer et al teaches all of the claim limitations set forth above, as well as the above process wherein the polymer is treated with water or aqueous alkaline solution before use.

- wherein (B) is styrene (C2/L34);
- wherein the molar ratio of (A) to (C) is from 1:0 to 1:10 (C2/L58-60, 50 mol% maleic anhydride and 25 mol % vinyl acetate would constitute a molar ratio of 1:0.5 (A) to (C));
- wherein the molar ratio of (A) to [(B) + (C)] is from 2:1 to 1:20 (C2/L58-60, 50 mol% maleic anhydride, 25 mol% styrene and 25 mol% vinyl acetate would correspond to a molar ratio of 1:1 (A) to (B)+(C));

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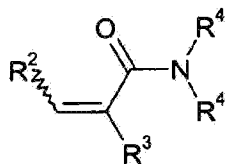
- wherein (C) is selected from the group consisting of ethylenically unsaturated C3-C8-carboxylic acid derivatives of the formula II



II

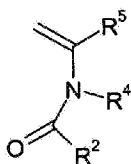
(C2/L47-50)

acrylamides of formula III

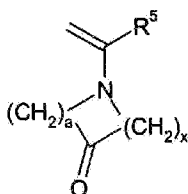


III

acyclic amides of the formula IV a, cyclic amides of the formula IV b



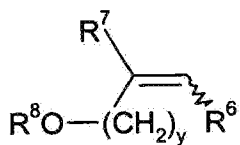
IV a



IV b

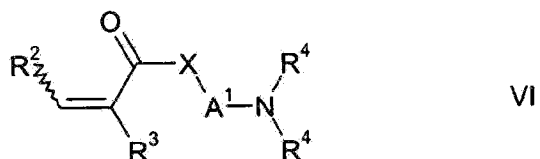
(C3/L30-34)

C1-C20-alkyl vinyl ethers, N-vinyl derivatives of nitrogen-containing aromatic compounds,  $\alpha$ ,  $\beta$ -unsaturated nitriles, alkoxyated unsaturated ethers of the formula V

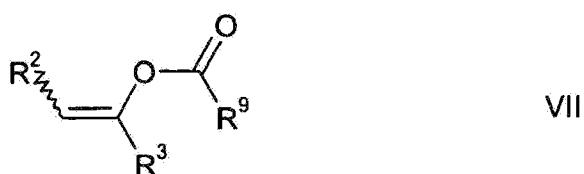


V

esters of the formula VI, amides of the formula VI



and unsaturated esters of the formula VII



(C2/L35-38)

in the formulae the variables being defined as follows:

R2 and R3 are identical or different and are selected from hydrogen and straight-chain and branched C1-C10-alkyl,

R4 are identical or different and are selected from hydrogen and branched and straight-chain C1-C22-alkyl,

R5 is hydrogen or methyl,

x is an integer from 2 to 6,

y is an integer selected from 0 and 1,

a is an integer from 0 to 6,

R6 and R7 are identical or different and are selected from hydrogen and straight-chain and branched C1-C10-alkyl,

X is oxygen or N-R<sup>4</sup>

R8 is [A1-O]<sub>n</sub>-R<sup>4</sup>,



R9 are identical or different and are selected from hydrogen and straight-chain and branched C1-C10-alkyl and the remaining variables are as defined above.

With regards to claim 7, Birkhofer et al teaches all of the claim limitations set forth above.

While Birkhofer et al discloses the process set forth above wherein a hydrolysis step is carried out (C5/L9-15), the reference does not specifically teach the hydrolysis at a temperature from 15 to 100 °C.

Since the instant specification is silent to unexpected results, the temperature is not considered to confer patentability to the claim. As rate of hydrolysis is a variable that can be modified by adjusting the temperature, the temperature would have been considered a result effective variable by one having ordinary skill in the art at the time the invention was made. As such, without showing unexpected results, the claimed temperature cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the temperature to obtain a desirable rate of hydrolysis (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (*In re Aller*, 105 USPQ 223).

With regards to claim 8, Birkhofer et al teaches all of the claim limitations set forth above as well as the above method wherein the polymers are metered as an aqueous dispersion or solution (C5/L9-10, disperse the product in an aqueous solution).

With regards to claims 9, Birkhofer et al teaches all of the claim limitations set forth above as well as a leather produced by the process set forth above (C5/L22, tanned hides are treated, such treatment would be expected to lead to a leather by one having ordinary skill in the art).

With regards to claim 10-13, Birkhofer et al teaches all of the claim limitations set forth above. Additionally, one having ordinary skill in the art would expect that the leather produced by the process set forth above would be used for any of a number of applications well-known in the art. As evidenced by Heidemann in Ullman's Encyclopedia of Industrial Chemistry, leather is used for shoes, upholstery, clothing, and carpets, among other purposes (Ullman's P259, introduction, first paragraph). Therefore, it would have been obvious to one having ordinary skill in the art to produce an article of clothing, piece of furniture, or automotive part comprising the leather set forth above.

### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated

by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claim 1 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 9, and 13 of copending Application No. 10/573,708. Although the conflicting claims are not identical, they are not patentably distinct from each other because one having ordinary skill in the art at the time of invention would recognize that in choosing a vinyl aromatic compound of formula VIII in the process of claim 13, which depends from claims 1 and 9, of copending Application No. 10/573,708, one would arrive at the invention claimed in instant claim 1.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAYMOND CHUNG whose telephone number is (571)270-3881. The examiner can normally be reached on Monday-Thursday, 7:30am-5pm EST, Alt. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basia Ridley can be reached on (571) 272-1453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R.C./

17 April 2008

/Basia Ridley/

Supervisory Patent Examiner, Art Unit 4145